A15 | A25

Veterinary configuration manual

English

Veterinary analysis

BioSystems

human – centred biotech

# Table of Contents

1. Set Customer Tests

1.1. Goal

One of the most common requests at veterinary sector, due the lack of specific veterinary software, is the chance to programming techniques with multiple reference range. Frequently this reference values differ significantly between species, or even between breeds and/or age of the patient. For that purpose, **we will duplicate each technique as much different species and/or reference range we need to define at our software and the reagent bottle will be shared for all of them**. This will enable us, **apart from add more reference ranges according to specie, breed or age, set other aspects corresponding specifically to this technique according the concrete specie**. For example, select an automatic pre-dilution in some species which normality ranges are higher than the linearity for the test itself, or repeat automatically certain concentrations according to the specie, among others.

1.2. Limitations to be taken into account

- Is mandatory to run a reagent blank of the entire list of duplicated test (marked in orange at software) and from the original whenever reagent batch is changed or when the original technique is calibrated (marked in violet). See image "Duplicated techniques".

- In order to avoid calibrate all duplicated techniques every time we perform a calibration, is possible to calibrate the original test and apply the obtained factor value at the rest of duplicated techniques (as long as the internal control reflect calibration is correct, and the reagent blank will be done for all these tests). Every time the original technique will be calibrated, the operator should introduce the new factor value obtained throughout the rest of the doubled techniques, using for this purpose a calibration through factor. See image "Apply factor value at duplicated test").

- By doubling techniques, will be required to copy the contamination list affecting at the original techniques on the new techniques created. Also will be needed for these contaminations between the new technique created and the rest of the tests, as it is programmed the original technique.
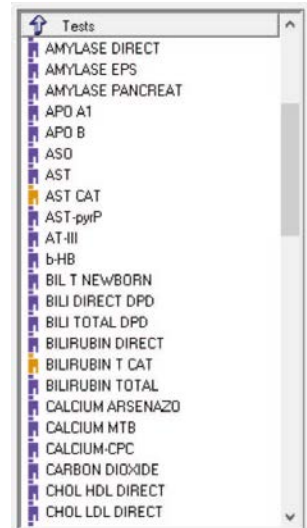
Duplicated techniques
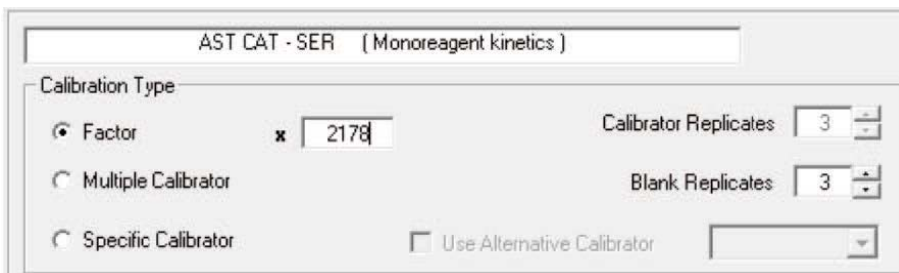
Apply factor value at duplicated test

1.3. Strengths

- AX5 software enable share reagent bottles, therefore is only needed to position 1 or 2 reagent flasks (depending if the test is mono or bi-reagent) for a same group of duplicated techniques.

- When techniques are duplicated, is mandatory to rename it from the original one. For example, can be seen in the displayed image "Duplicated test" ALT (original) ALT CAT (created). Regardless the technique's name at the software, the AX5 allows to edit how we want to be shown the technique on the report file. Due this fact, on the result reporting ALT and ALT CAT will be shown as ALT or the names we want do define for them.

- If the test programming of the duplicated test is not changed (dispensed volume sample/reagent), will be only necessary to place an internal control to one of them, for example, the original one. It is possible to extrapolate this control to the rest of the techniques.

- Once the tests are tailored for the vet customer, it is possible to save the changes made at Programming > Record Test File. By this way, in case of any problems may occur (deletion of data on updates, disappearing pre-designed techniques, etc.) will be possible to recover the changes made loading again the techniques, going to Programming > Load test.

1.4. Follow-up Steps

1.4.1. Duplicate test copying the information from the original technique

1. At Main Menu, go to Programming > Tests

2. On the Tests list, double click on the technique we want to duplicate.

3. Change the name of the technique on the General tab.

4. Save changes.

5. Search at the end of the list the new technique created and drag it till the preferred place. The ideal is close to the original one.

6. If you want to duplicate more techniques, repeat the steps from 2-5.

7. Save changes.

1.4.1. Share reagent from original test with the new one created

1. At the Main Menu, go to Programming > Shared Reagents.
2. Create new reagent to share
3. Enter name and number of reagent (R1 or R2).

   Note: the name of shared reagent cannot be the same than the name of the original test.
4. Save changes.
5. Repeat steps from 2-4 for the rest of shared reagents required to create.
6. Save changes.
7. At the Main Menu, go to Programming > Tests
8. On the Tests list, double tap on the technique that we want to share reagent.
9. On General tab, at Shared Reagents, select the corresponding reagents.
10. Save changes.
11. Repeat steps from 8-10 for the rest of tests.
12. Save changes.

### 1.4.2. Rename tests on results reports

1. At the Main Menu, go to Programming > Tests
2. On the Tests list, double tap on the technique we want to rename.
3. On General tab, type the desired name on the section Name.
4. Save changes.
5. Repeat steps from 2-4 for the rest of techniques.
6. Accept changes.

1.4.3. Modify duplicated test

1. At the Main Menu, go to Programming > Tests ❄
2. On the Tests list, double tap on the test we want to modify.
3. Assign reference interval for each test, repetition range, activate predilutions, etc.
4. Save changes.
5. Accept changes.

1.4.4. Duplicate contaminations between tests

1. At the Main Menu, go to Programming > Contaminations.
2. Write down all contaminations affecting the original test duplicated before, for example, CK contaminates CHOLESTEROL.
3. Create the same contaminations with the new test, for example, CK CAT contaminates CHOLESTEROL CAT. To this effect, select the option New, select the contaminating test and the test contaminated and Save changes. See image "Duplicate contaminations".
4. Repeat step 3 for each new contamination and Accept changes when it is done.
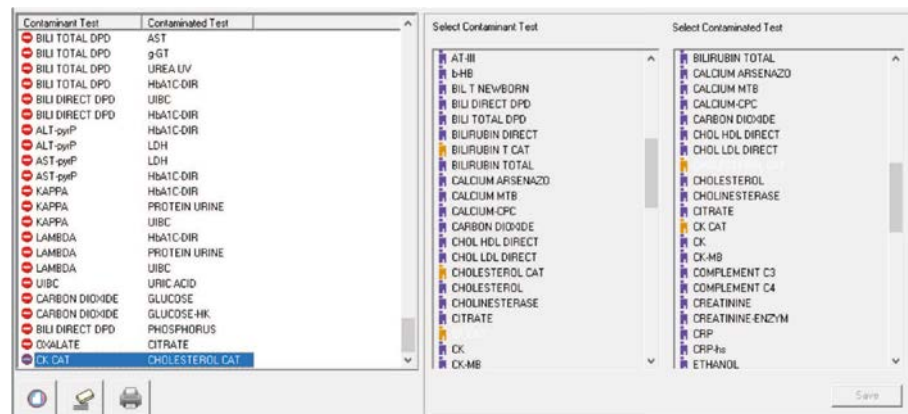
Duplicate contaminations

2. Configuration Customized Vet Reports

2.1. Goal

Many of the users at vet sector do not work with LIMS. Due this fact, it is mandatory be able to **edit results reports with the customer information**.

2.2. Limitations to be taken into account

- Logotype can be added at the results report only as Bitmap images with extension .bmp if it takes up little space.
- Logotype is shown at the report in a small size.

2.3. Follow-up Steps

1. At the Main Menu, go to Configuration > Head Report.

2. Type the name of the laboratory, address, telephone, attach image or logotype of the vet practice, modify font size (see image Head Report).

3. Accept changes.

Head Report

3. Edit Calculated Tests

3.1. Goal

It is quite common at the veterinary area that the users work with calculated techniques. It is requested the possibility to show, not only the results of the calculated test, **but also display the results of the techniques which form part of this calculation, named experimental techniques**. In the same way, it is possible to include the reference ranges of the calculating formulas or change the units of these techniques.

3.2. Limitations to be taken into account

Changes are done from the internal folders of AX5 files, not from the software. Due this, if the customers afterwards want to execute any modification, should contact with theirs technical support contact in order to modify the corresponding internal file.

3.3. Follow-up Steps

```
[UPC]
LiteralFormula = PROTEIN URINE/CREATININE Urine
IdFormula = 3
A_EDIT = 0
A_DESC =
A = 1
B_EDIT = 0
B_DESC =
B = 1
C_EDIT = 0
C_DESC =
C = 1
D_EDIT = 0
D_DESC =
D = 1
NomTecParcial1 = PROTEIN URINE
NomTecParcial2 = CREATININE
NomTecParcial3 =
NomTecParcial4 =
TipoTecParcial1 = URI
TipoTecParcial2 = URI
TipoTecParcial3 =
TipoTecParcial4 =
Unidades =
Decimales = 3
TipoMuestra = URI
NormalidadMax = 0.4
NormalidadMin = 0.2
BorderLineMax =
BorderLineMin =

'// 0 -> No / 1 -> Si
ExcluirParcialesDeInformeFinal = 0
```

Information of each calculated technique

1. Ensure the AX5 software is not being executed at PC.

2. Go to PC to My Computer.

3. Copy the next hyperlink on the browser: C:\ProgramFiles(x86)\AX5.

4. Search the file CalculatedTest.ini and copy at the desktop of the PC. Open the file .txt copied previously at the desktop.

   Note: apart from copy the file CalculatedTests.ini at the desktop, this will be the copy to modify. It is recommended to have a security copy at other folder. For example, a file TEMP created at disk C to have it as a backup.

5. Search the calculated test for edit it. This is shown in brackets. For example [UPC] (See image "Information of each calculated technique").

6. Appropriate changes must be made, as change the units on the calculated test at the section Units or modify the Normality Ranges at the sections NormalityMax and NormalityMin. If we want to show on the report the experimental techniques conforming a calculated technique, on the section ExcluirParcialesDeInformeFinal add a 0 (see image "Information of each calculated technique" marked in green).

   Note: care should be taken into ensure modify only the parameters mentioned. Any other modification could change the proper functionality of the calculated test on the software.

7. Save changes at Folder > Save as.

   Note: make sure that the file is saved at the Desktop; and is added in codification Unicode (See image "Save with Unicode codification").
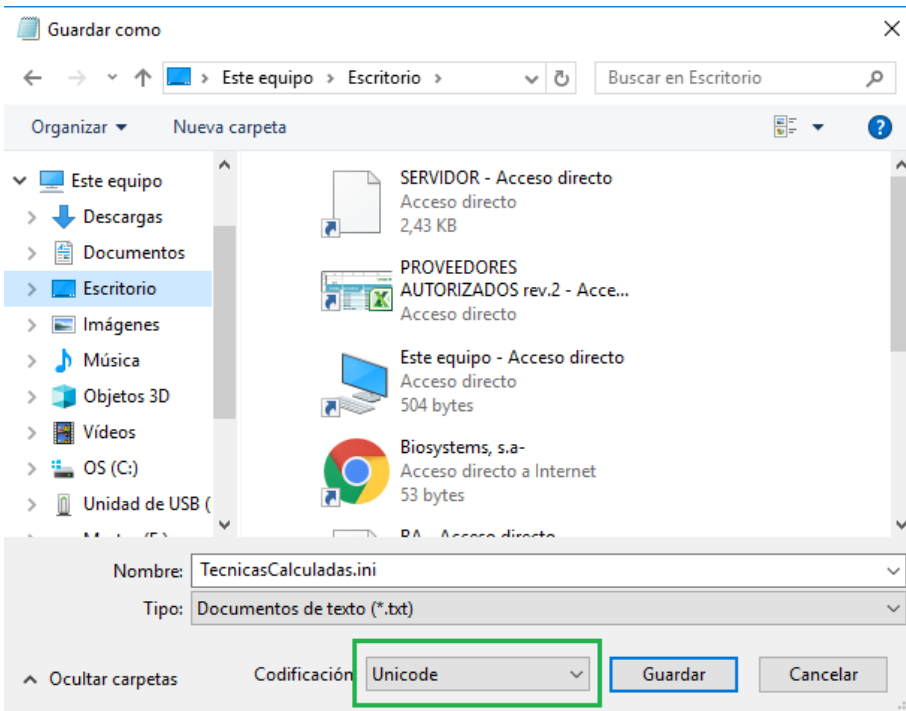
Save with Unicode codification

8. Go to My Computer.

9. Copy the following route on your browser: C:\ProgramFiles(x86)\AX5.

10. Delete the files "TecnicasCalculadas.Ini" and "TecnicasCalculadas.Bin".

11. Cut from the Desktop the file TecnicasCalculadas.Ini modified and paste at C:\ProgramFiles(x86)\AX5.

12. Open the software AX5 and verify the changes at Programming > Calculated Test.

4. Duplicate Calculated Test

4.1. Goal

Duplicate the calculated test that, by default, appear at the software with the aim of duplicate the techniques created by the user.

4.2. Limitations to be taken into account

- Calculated Test Duplicated should have a different name from the original calculated test, for example, UPC (original) and UPC CAT (duplicated).

- Is not possible to modify the name on the new calculated test on the result report. Consequently, on the report will be still named UPC CAT, following with the same example.

4.3. Follow-up Steps

1. Ensure the AX5 software is not being executed at PC.

2. Go to PC to My Computer.

3. Copy the following route on your browser: C:\ProgramFiles(x86)\AX5.

4. Search the file TecnicasCalculadas.ini and copy at the desktop of the PC. Open the file .txt copied previously at the Desktop.

   Note: apart from copy the file TecnicasCalculadas.ini at the Desktop, this will be the copy to modify. It is recommended to have a security copy at other folder. For example, a file TEMP created at disk C to have it as a backup.

5. At the beginning of the folder, on the section [TECNICASDEFINIDAS], add the calculated test desired. To this effect, add an extra row drawn from the last line. Copy always the same format of the previous rows and add a new name on the calculated test, different than the written by default. See image "Duplicate calculated test".

   Note: care should be taken into ensure modify only the parameters mentioned. Any other modification could change the proper functionality of the calculated test on the software.

6. On the same section [TECNICASDEFINIDAS] > MaxTecnicasCalculadas, indicate the new number maximum of test that is on the folder now. See image "duplicate calculated test".

7. Go to the original technique that we want to duplicate and copy all the information (see image "information of each calculated test").

8. Paste the information at the end of the document, leaving a space between the information of the prior technique and the new one. See image "Edit the information of calculated test".

Duplicate calculated test

9. Modify the name of the duplicated technique that appears in square brackets [], as is detailed at step 5. Also modify the name of the techniques that are already part of this calculated technique, as it appears at the software from the analyzer on the sections NomTecParcial. See image "Edit information from the calculated test".

10. Save changes at Folder > Save as.

    Note: make sure that the file is saved at the Desktop; and is added in codification Unicode (See image "Save with Unicode codification").

11. Back to My Computer.

12. Copy the following route on your browser : C:\ProgramFiles(x86)\AX5.

13. Delete the files "TecnicasCalculadas.Ini" and "TecnicasCalculadas.Bin".

14. Cut from the desktop the file TecnicasCalculadas.Ini modified and paste at C:\ProgramFiles(x86)\AX5.

15. Open the software AX5 and verify the changes at Programming > Calculated Test.


```
'// 0 -> No / 1 -> Si
ExcluirParcialesDeInformeFinal = 0

[UPC GATO]
LiteralFormula = PROTEIN URINE/CREATININE Urine
IdFormula = 3
A_EDIT = 0
A_DESC =
A = 1
B_EDIT = 0
B_DESC =
B = 1
C_EDIT = 0
C_DESC =
C = 1
D_EDIT = 0
D_DESC =
D = 1
NomTecParcial1 = PROTEIN URINE
NomTecParcial2 = CREATININE GATO
NomTecParcial3 =
NomTecParcial4 =
TipoTecParcial1 = URI
TipoTecParcial2 = URI
TipoTecParcial3 =
TipoTecParcial4 =
Unidades =
Decimales = 3
TipoMuestra = URI
NormalidadMax = 0.4
NormalidadMin = 0.2
BorderLineMax =
BorderLineMin =

'// 0 -> No / 1 -> Si
ExcluirParcialesDeInformeFinal = 0
```

Edit information from the calculated test

5. Create Profiles

5.1. Goal

At veterinary diagnostic is very common work following established profiles: hepatic profile, pre-anesthetic profile, renal profile, etc. **We will create profiles for the customers who work in manual mode (without LIMS).**

5.2. Follow-up Steps

1. At the Main Menu, go to Programming > Profiles

2. Create a new profile

3. Select the name, type of sample and select the techniques that conform this profile using the arrows (see image "Create new profile").
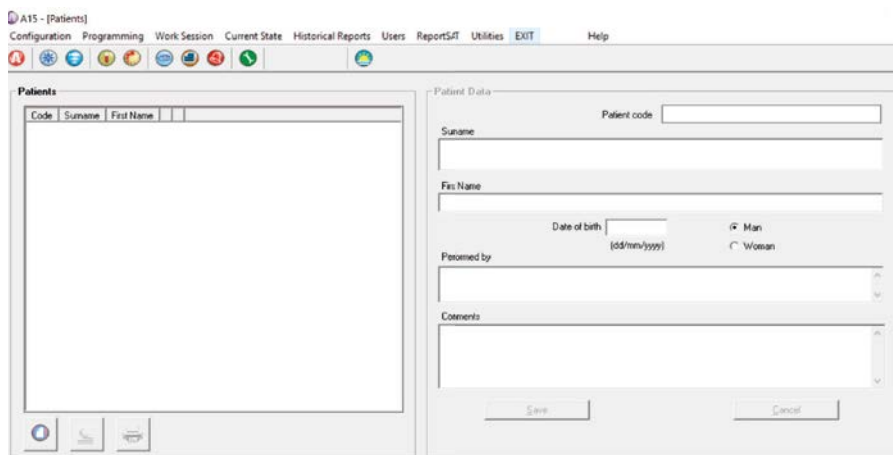
4. Save and accept changes.
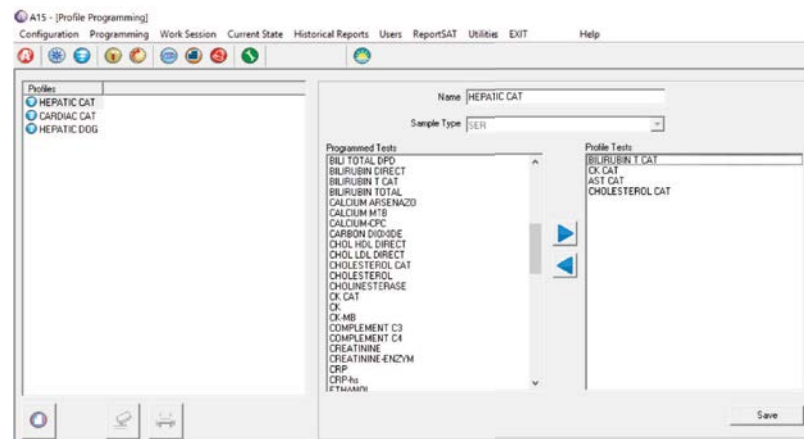
Create new profile

6. Set Patient Records

6.1. Goal

The aim is to have an accurate register of the patient's analyses on the historical record of results at AX5.

6.2. Follow-up Steps

1. Go to Introduction of New Samples

2. Select the option Contains Patient Data

3. Add a new worksheet

4. Introduce patient's code, name and surname, date of birth, sex, analysis operator and any additional comment. Special attention should be paid to the section Comments, where we can add to our reports information as breed of the patient, any previous pathologies, etc. See image "Create patient's worksheet".

Create patient's worksheet

Note: if you are not working with barcode, it is recommended to identify the patient with its name for example, or assign a patient's number, as the medical record number.
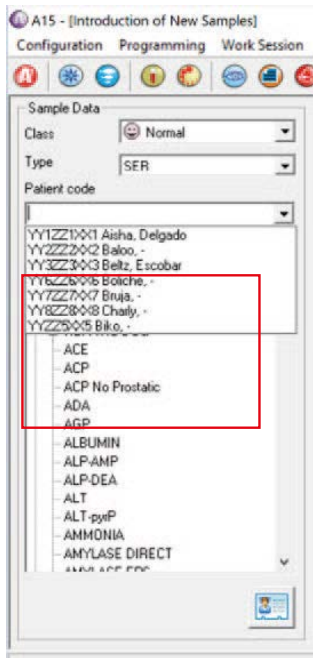
Search worksheet created

Note: by default, at the sex section the options available are only Man/Woman; and it is a field impossible to modify.

5. Save changes.

6. When it is introduced a sample at Introduction of New Samples, as patient code search at the drop-down menu worksheets created. See image "Search worksheet created".